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Kampus Sungai Petani

Faculty of Administrative
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AGRICULTURAL CAREER TRAINING PROGRAM FOR DROP OUT STUDENTS THROUGH WORK BASED LEARNING

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ABSTRACT

Agriculture is a broad field that encompasses farming, cultivation, aquaculture, and downstream industries. The agricultural sector continues to face a shortage of skilled and semi-skilled professional labour, which is generally available in most Malaysian private farms. Graduates with agricultural degrees, diplomas, and certificates from universities, polytechnics, vocational colleges, training centers, and associated departments have filled some of the roles. All such academic programs, however, require at least a SPM certificate to apply. Nevertheless, there is another source of human capital that can be trained and optimized, and they are PT3 students who dropped out in education due to low academic achievement. It is the government's role, particularly for state governments, to provide a second educational opportunity for these young people, and to lessen the societal ills associated with adolescent dropouts. Therefore, an academic program in agriculture at the certificate level, specifically for PT3 dropouts needs to be developed into a good academic product that is ready to be commercialized. Basic knowledge in the field of cultivation, livestock, and fisheries should be emphasized in this program. Students will be exposed to the concept of entrepreneurship throughout the training, whether theoretically in the classroom or practically in the field, which will be beneficial for them. Hence, they will be able to meet the high demand for employment and be able to create commercialization opportunities in agriculture. It is envisaged that through this academic program, human capital that are produced will be able to develop their own careers using agricultural expertise acquired through entrepreneurial operations, as well as give employment chances for others.

Keywords: agricultural education, training program, drop out students, work based learning, entrepreneurial education.

INTRODUCTION

Malaysia has the potential to become a major hub in the agricultural industry. Therefore, it is the responsibility of the government to work on this challenge by using the existing resources in the form of human capital and land resources (Dardak, 2015). Among the potential of human capital comes from PT3 students who dropped out in education due to low academic achievement (Rasmy, Selvadurai and Sulehan, 2017). It is the responsibility of the government to provide other opportunities for these young people to be able to become more beneficial and

successful human beings, and contribute to the development of the country (Rasmy, Selvadurai and Sulehan, 2017). In this context, the opportunity provided is a manpower training program to meet the needs of human resources in agriculture in Malaysia. To meet this need, an academic program in agriculture at the certificate level specifically for PT3 dropped out needs to be developed. This program should emphasize on basic knowledge in the fields of cultivation, livestock and fisheries. Throughout the training, whether theoretically in the classroom, or practically in the field, students will be exposed to the concept of entrepreneurship, which will be an advantage for the program. The training emphasizes on the way students view agriculture as something that can be translated into a high-potential enterprise. With adequate skills and training in the field of cultivation, livestock and fisheries - strengthened with entrepreneurial skills, students from this program will be able to meet the high demand for employment and be able to create commercialization opportunities in agriculture. The main goal of this academic program is to provide formal agricultural education to dropped out students of PT3 and hence reduce social ills involving those adolescents. This group of human resources needs to be helped and trained to become successful human beings that can contribute to the development of the country, especially in the agricultural sector which lacks semi-skilled labor force. Based on this goal, the curriculum developed also includes holistic learning with an emphasis on spiritual aspects, generic skills and entrepreneurship, as well as exposure to smart agriculture by applying ICT and digital technologies to compete in the agricultural sector globally. It is hoped that this academic program will produce human capital that will also be able to create their own careers using knowledge in agriculture owned through entrepreneurial activities, as well as provide employment opportunities for others.

PROBLEM STATEMENT

The field of agriculture is a very wide field, which includes farming, cultivation, aquaculture and downstream industries. To date, the agricultural sector is still experiencing a shortage of skilled and semi-skilled professional manpower which is widely offered by most private farms in Malaysia (Dardak, 2015). Some of the positions have been filled by graduates of degrees, diplomas and certificates in agriculture offered at institutions of higher learning, polytechnics, vocational colleges, training centers and related departments. However, all such academic programs can only be applied for by at least SPM graduates. Subconsciously, we forget about another potential human capital that comes from PT3 students dropped out due to low academic achievement or poverty. This group also has the potential to get caught up in social ills that involve adolescents as early as primary school level (Rasmy, Selvadurai and Sulehan, 2017). Therefore, it is the responsibility of the government - especially the state governments to provide a second educational opportunity for these young people and further reduce the social ills that involve adolescents who drop out of education. Another issue is on wasteland resources. In Kelantan for example, there are 2% vacant land that approximates to 32,297 hectares that can be cultivated. This requires human resources among young people who are competitive and skilled. In this context, to address both issues the opportunity that needs to be provided is a workforce training program to meet the needs of human resources in the field of agriculture in Malaysia. Therefore, to realize the proposed training program, the potential of human capital that comes from PT3 dropped out students is a resource that needs to be developed optimally. With the availability of this trained workforce as well, then idle agricultural land can be reduced by encouraging them to cultivate it.

PRODUCT DESCRIPTION

This is an educational product with holistic curriculum structure that offers certificate of agriculture to the dropout PT3 students. The formation of this curriculum structure is based on the findings of two studies related to the field of agriculture since 2011. The first study entitled “Status and problems of ECER youth involvement in agriculture and agroindustry” was done under grants provided by the Malaysia Youth Development Research Institute while the second study entitled “Marketability status of graduates in the field of agriculture in Malaysia” was funded by UMK internal grant. Starting from these researches, it has led to a scholarly roundtable discussions with the Kelantan state government, relevant agencies and experts in the field of agriculture in UMK. In 2019, a holistic curriculum for agricultural certificate programs was successfully created. The program is classified into Agricultural Core Courses, Spiritual Core, Entrepreneurship Core and Language and Communication amounting to a minimum of 30 credit hours as in Table 1. Course offerings are as shown in Table 2. The complete syllabus of each course in the curriculum structure has also been completed.






COURSES	%(Credits)
• General 	12.5%(4)
• Spiritual  • Entrepreneurship  • Language and Communication 	18.8%(6)
• Agricultural 	(68.8%)22
TOTAL	(100.0%)32

Figure 1: Curriculum structure for Agricultural Certificate Program (ACF)

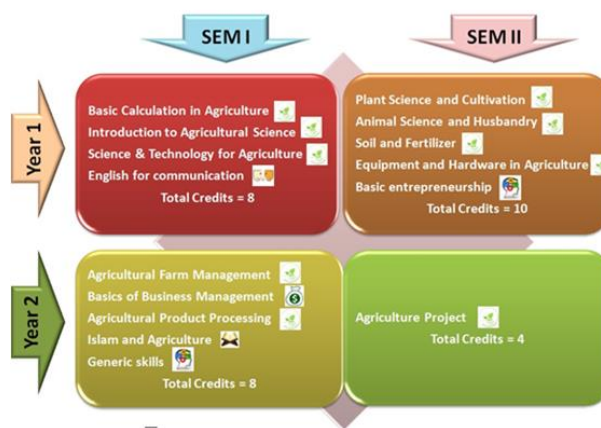


Figure 2: Agricultural Certificate Program (ACF)’s Course Structure

PRODUCT ACHIEVEMENT

Novelty

This educational product is the only course offers in Malaysia aimed to alleviate numbers of drop-out students. The complete syllabus for all courses in this program was developed by experts in UMK and has been agreed by academic committee of the members. The development of this syllabus had also considering human resources to be developed to optimize the opportunity in obtaining formal education for them that can produce better quality of human capital for the country.

Innovation Impact

This two (2) years agricultural academic program is a certificate level program. The minimum total credit to graduate is 30 credits, which gives emphasis on theoretical and practical learning (1 + 1). A student must spend at least four (4) semesters to be awarded for a certificate. However, the maximum number of semesters is six (6) semesters. This program is offered as a general field in agriculture to provide understanding in all aspects related to the agricultural industry. The curriculum formed using holistic approach which will produce a balanced and competent semi-skilled human capital in the field of agriculture. This academic program will be beneficial to any states governments who wanted to utilized their resources i.e.; drop-out students and wasteland in agriculture.

Commercialization Potential

- Curriculum structure and completed syllabus of all causes in this academic program can be apply for intellectual property (IP).
- A future ready curriculum in certificate program of agricultural.
- Module of each course can also be developed and applied for IP.
- As a franchise academic program that will be run by state governments through the potential sponsorship.
- Consultant/expert for accreditation process of this academic program to the interested state government or parties.

IP/Publication/Industry

- Two (2) journal articles have been published prior to the establishment of this program.
- Another there (3) Scopus articles will be submitted.

Table 1: Proof of Publications

No	Title	Journal
1	Competency of IPTA Agricultural Graduates in Malaysia	International Journal of Management Education
2	Perceptions of Agricultural Students on a career in agriculture	Research in Science Education
3	Status of career opportunities in plantations and commercial agriculture in Malaysia	Journal of Planning Education and Research

- Next steps will be focused on IP application for curriculum, syllabus and model

- Final steps is collaborating with state governments in franchising the proposed academic program and finding a potential agencies/industries to sponsor the students.

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Cawangan Kedah
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